

In the Specification:

Please amend the paragraph at Page 9, line 12-Page 10, line 14, as follows:

In a first preferred embodiment, a host which sends packets onto a virtual LAN manages a set of packing buffers, and separates outbound packets into appropriate ones of these packing buffers based on the next-hop IP address for each packet. Note that this host, which is referred to herein as a "sending host", is not necessarily the host which originally generates the packets. (The sending host determines the next-hop IP address for a particular packet by using the destination IP address from the packet's IP header to access a routing table for a route corresponding to that destination, using techniques which are known in the art and which do not form part of the present invention.) By separating the outbound packets in this manner, a particular packing buffer accumulates packets destined for a single next-hop address. When an appropriate threshold (which may depend on the current workload of the system) is reached to indicate that buffered packets should be transmitted (such as expiration of a timer, reaching a counter of buffered packets, filling a packing buffer, etc.), the host sends one or more of the packing buffers to the device driver, using a single I/O operation, for routing the buffer(s) onto the virtual LAN. Preferably, a "SIGA" (Signal Adapter) instruction is used for this sending of packing buffers, where the data sent on this instruction equates to a single "transmission unit or frame" for which the SIGA command is designed. The device driver can then quickly transmit the entire unit (comprising one or more packets) to the target host, and only needs to look at the next-hop IP address of the first packet in each packing buffer in order to determine where to send the entire set of packets in that packing buffer or frame. This approach makes it transparent to the device driver how many packets the host is sending, and shields the device driver from having to inspect each packet header in order to send the buffered packets, thereby greatly improving the efficiency of the packet forwarding process. (The Signal Adapter instruction is defined in commonly-assigned U. S. Patent [[____]] 6,345,325, serial number 09/252,728, filed 2/19/1999, which is entitled "A Method and Apparatus for Ensuring Accurate and Timely Processing of Data Using a Queued Direct Input-Output Device".)